

Lesson Plan
2nd grade

Materials Needed:

Alexander book
Coins (quarters, dimes, nickels, and pennies)
Pictures of items to buy with prices

Mathematical Goals for the Lesson:

The students will gain practice and fluency subtracting multi-digit numbers. Students will recognize when re-grouping is necessary and will be able to use proof drawings and/or a re-grouping algorithm to successfully subtract multi-digit numbers. Students will gain practice and fluency counting coins.

GLCE's addressed by this lesson:

N.MR.02.09 Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.

N.FL.02.10 Add fluently two numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.

Brief Description of the Lesson:

In this story, Alexander starts with \$1.00 that his grandparents gave him. Over the course of several days, Alexander spends his money in various ways until he has no more money.

We will gather together to read this story. As Alexander spends his money, students will work on whiteboards to determine how much money he has left. We will keep track together on a large white board or chart paper. I will ask students to share their work with the rest of the class as we solve the various problems ($100-15=85$; $85-15=70$; $70-12=58$; $58-10=48$; $48-8=40$; $40-11=29$; $29-4=25$; $25-5=20$; $20-20=0$).

I will look for various approaches to highlight, including proof drawings, formal algorithm, and mental math.

Alexander's brothers have more money than he does. We will use coins to determine how much money each brother has and then we will pose some "what if" scenarios for how the brothers could spend some of their money and how much they would have left. Questions to ask include:

- How much money does Anthony have (\$3.38 before his Grandparents give him a dollar)
- How much money does Nicholas have (\$2.38 before his Grandparents give him a dollar)
- How much more money does Anthony have than Nicholas?
- Nicholas buys a toy that costs 52 cents. How much money does he have left?
- Anthony earns \$1.50 mowing the lawn. How much money does he have now?

**Alexander, Who Used to
Be Rich Last Sunday**

By Judith Viorst

Simon & Schuster, 1978

NOTE: Throughout this activity we will write money amounts in cents (338 cents) rather than using decimal notation.

Possible Extensions:

Give students pictures of items and their costs and have them try to spend as much of Nicholas' or Anthony's money as they can without running out of money. Another option is to pose a missing partner question instead of a missing total question. For example, Anthony had 338 cents and spent some money on a book. He now has only 119 cents left. How much did the book cost?